

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/031288

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C23C14/56 B08B3/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C23C B08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/033381 A1 (NAKABAYASHI ET AL) 21 March 2002 (2002-03-21)	1-3, 9
Y		4, 5, 8, 10, 14
A	<p>abstract</p> <p>paragraph '0001! - paragraph '0004!</p> <p>paragraph '0010! - paragraph '0033!</p> <p>paragraph '0050! - paragraph '0055!</p> <p>paragraph '0059! - paragraph '0071!</p> <p>paragraph '0083!</p> <p>claims; figures</p> <p>-----</p> <p style="text-align: center;">-/-</p>	16-18, 25

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the International search

3 February 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 178 133 A (APPLIED MATERIALS, INC.) 6 February 2002 (2002-02-06)	4,5
A	abstract paragraph '0001! - paragraph '0004! paragraph '0016! paragraph '0019! - paragraph '0022! paragraph '0027! claims; figures	1,8,9, 16,19, 20,25
Y	US 5 565 058 A (BANHOLZER ET AL) 15 October 1996 (1996-10-15)	8,10,14
A	the whole document	1,9,16, 22,25
A	EP 0 584 483 A (APPLIED MATERIALS, INC.) 2 March 1994 (1994-03-02)	1,4,8,9, 14,16, 19,24,25
	abstract column 1, line 3 - column 5, line 41 column 6, line 28 - column 7, line 55 claims; figures	
A	US 5 660 640 A (LAUBE) 26 August 1997 (1997-08-26)	1,8-10, 14-16, 22,24,25
	the whole document	
A	US 6 162 297 A (MINTZ ET AL) 19 December 2000 (2000-12-19)	1,4,5,8, 9,16,19, 20,25
	abstract column 1, line 5 - column 3, line 37 column 4, line 65 - column 5, line 16 claims; figures	
A	US 2003/116427 A1 (DING ET AL) 26 June 2003 (2003-06-26) cited in the application abstract paragraph '0044! - paragraph '0047! paragraph '0053! - paragraph '0054! paragraph '0058! - paragraph '0059! paragraph '0063! figures 4-6	1,4-6,8, 16,19, 20,25

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Information on patent family members

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